

# TNQG: Tensor Network Quantum Gravity

A New Foundation for Safe, Efficient, and Scalable AGI Infrastructure

## FRONT PAGE OVERVIEW

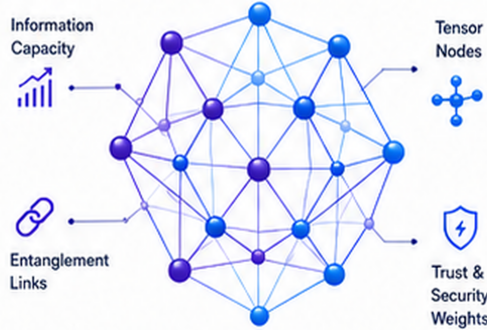
### 1 EXECUTIVE SUMMARY



TNQG is a tensor-network-based infrastructure framework that unifies information, compute, networking, storage, and control into a single, coherent substrate.

By leveraging entanglement structures and information geometry, TNQG delivers a safe, efficient, and scalable foundation for AGI systems.

### 2 TNQG PARADIGM



A unified model across physical and logical layers enabling predictive control, resilience, and natural alignment.

### 3 KEY BUSINESS VALUE BY DOMAIN

AI / AGI	<ul style="list-style-type: none"> <li>Enables safe training &amp; inference at scale</li> <li>Improves alignment and reliability</li> </ul>
Networking	<ul style="list-style-type: none"> <li>Intelligently routes with entanglement topologies</li> <li>Self-healing and adaptive to change</li> </ul>
Compute	<ul style="list-style-type: none"> <li>Optimizes workload placement</li> <li>Improves GPU/TPU utilization and efficiency</li> </ul>
Storage	<ul style="list-style-type: none"> <li>Reduces latency and cross-region traffic</li> <li>Intelligent tiering for durability and cost savings</li> </ul>
Security	<ul style="list-style-type: none"> <li>Zero-trust enforcement at the fabric</li> <li>Anomaly detection with global context</li> </ul>
Operations	<ul style="list-style-type: none"> <li>Unified observability and control</li> <li>Predictive automation and closed-loop optimization</li> </ul>

### 4 ARCHITECTURE OVERVIEW



### 5 MARKET COMPARABLES

Solution	Scope	Global Optimization	Information Geometry	Predictive Control	Self-Healing / Entanglement	Designed for AGI Safety
TNQG	Full Stack	✓	✓	✓	✓	✓
SDN / Intent Networking	Networking	Partial	No	Partial	No	No
AIOps / Observability	Operations	Partial	No	Yes	No	No
SDS / HCI	Storage	Partial	No	No	No	No
Cloud Orchestrators	Compute	Partial	No	Partial	No	No
Quantum Networking	Networking	No	Partial	No	Partial	No



TNQG is the only architecture that unifies the full stack with global optimization, information geometry, and built-in safety for AGI.

### 6 TECHNICAL SOUNDNESS & DIFFERENTIATION

- Unifies global optimization across compute, networking, storage, and control.
- Leverages information geometry to predict, verify, and steer control.
- Ensures safe, bounded control with verifiable risk constraints.
- Built for resilience with entanglement-based redundancy and self-healing.

TNQG is technically more sound because it unifies all dimensions of intelligent infrastructure.

### 7 BUSINESS IMPACT AND ROI

20-40% Lower Operating Costs	30-60% Improved Resource Utilization
10x+ Reduction in Security Incidents	20-30% Energy Savings
Sustainable performance. Lower cost. Higher trust.	

### 8 CONCLUSION



TNQG enables organizations to build and operate AGI infrastructure that is safer, more efficient, and infinitely scalable.

By unifying the mathematics of tensor networks and information geometry across the full stack, TNQG sets a new standard for the next generation of intelligent systems.

TNQG is the foundation for safe, efficient, and scalable AGI.

### 9 AT A GLANCE

- ✓ Unified full-stack architecture
- ✓ Global optimization & control
- ✓ Information geometry enabled
- ✓ Built-in safety & resilience
- ✓ Self-healing and adaptive
- ✓ Designed for AGI safety

THE INFRASTRUCTURE LAYER FOR THE AGE OF AGI

